

NOTES ON THE TWO PAPERS ON APHIDIDÆ BY
RAFINESQUE.

BY H. F. WILSON.

These papers were published in the American Monthly Magazine and Critical Review, Vol. I, 1817, pp. 16-18, and Vol. III, 1818, pp. 360-362.

In the first paper he described 12 new species and erected two genera. In the second he described 24 additional species and two new genera.

I do not understand why these papers should have been so long overlooked or ignored. It is true that the descriptions are short, yet the names will have to be accepted in aphid nomenclature, and some, if not all, of the species described are distinguishable. During the past summer an effort was made to locate some of these species, by collecting specimens from the plants named by Rafinesque and comparing them with his descriptions. I was partially successful and am convinced of the identity of the species indicated in this paper. All of the species were placed in genera and groups according to the length of the antennæ and appendages (nectaries).

The apterous forms were considered to be females and the winged forms males.

A few species given as not having appendages may not be recognizable. The descriptions were numbered from 1 to 36, and I have started with No. 1, making a note under each species. Those species before which the asterisk (*) is given were not located by me. Another season an effort will be made to locate these.

LIST OF SPECIES.

1. **Aphis diervilla-lutea* Raf., p. 360.
2. **Aphis aralia-hispida* Raf., p. 360.
3. **Aphis aquilegia-canadensis* Raf., p. 361.
4. *Aphis hieracium-venosum* Raf., p. 361.
5. **Aphis melampyrum-latifolium* Raf., p. 361.
6. *Aphis pteris-aquilinoides* Raf., p. 361.
7. *Aphis campanula-riparia* Raf., p. 361.
8. **Aphis chenophyllum canadense* Raf., p. 361.
9. **Aphis erigeron-philadelphicum* Raf., p. 361.
10. *Aphis verticolor* Raf., p. 331, on *Hieracium venosum* and *Cichor. acerus*.
11. **Aphis furceps* Raf., p. 361, on *Primula veris* and *Bellis perennis*.
12. **Aphis fuscilava* Raf., p. 361, on garden plants. Apparently not an aphid. (List of first paper, 1817.)

13. *Aphis rosa-suaaveolens* Raf., p. 16.
14. *Aphis dipleptha* Raf., p. 16, on roses.
15. **Aphis rhodryas* Raf., p. 16, on wild roses.
16. *Aphis viburnum-opulus* Raf., p. 16.
17. *Aphis viburnum-acerifolium* Raf., p. 16.
18. *Aphis crataegus-coccinea* Raf., p. 16.
19. *Aphis cornus-stricta* Raf., p. 16.
20. *Aphis populus-grandidentata* Raf., p. 16.
21. *Aphis populus-trepida* Raf., p. 16.
22. *Aphis jacobea-balsamita* Raf., p. 16.
23. *Aphis oreaster* Raf., p. 17, on *Aster simplex*.
24. *Aphis erigeron-strigosum* Raf., p. 17.
25. *Aphis gibbosa* Raf., on *Solidago odora*.
26. *Aphis xanthelis* Raf., p. 17, on *Solidago nemoralis*.
27. *Aphis annulipes* Raf., p. 17, on *Hieracium gronovii* and *H. paniculatum*.
28. *Aphis hieracium-paniculatum* Raf., p. 17.
29. *Aphis verberna-hastata* Raf., p. 17.
30. *Aphis polanisia-graveolens* Raf., p. 17.
31. **Aphis arabis-mollis* Raf., p. 17.
32. **Aphis polygala-senega* Raf., p. 17.
33. *Aphis brassica-napus* Raf., p. 17.
34. **Aphis erigeron-canadense* Raf., p. 17.
35. **Aphis ambrosia* Raf., p. 17, on *Ambrosia*.
36. **Aphis acaroides* Raf., p. 17, on *Lepidium virginicum* L.

In the first paper the genus *Loverates* was suggested for species 1 and 9. For species 12 the name *Cladoxus* was given.

In the second paper he gives species 1 for the genus *Loverates*. This would make species 1 as the type (*Aphis diervilla-lutea*).

Two additional genera were suggested in this paper—*Adactynus* (species 2, 4, 5, 6, 7, 8, 10, 11, 13, 14, 15, 16, 17, 18, 19, 23, 24, 27, 31, 33, 34, 35, 36), and *Dactynus* (species 20, 21 (= *Chaitophorus*), 22, 25, 26, 28 (= *Macrosiphum*), 29, and 30).

Mastapoda pteris-aquilinoides Raf.

Syn.: (*Aphis pteris-aquilinoides* Raf.)

(*Mastapoda pteridis* Oestlund.)

Hyalopterus rosa suaaveolens Raf.

Syn.: (*Aphis rosa-suaaveolens* Raf.)

(*Aphis aquilegiae-flava* Kittel.)

(*Aphis trirroda* Walker.)

(*Hyalopterus aquilegiae* Koch.)

(*Hyalopterus aquilegiae-flava* Hayhurst.)

Aphis viburnum Scopoli.

- Syn.: (*Aphis viburnum-opulus* Raf.)
 (*Aphis viburnum acerifolium* Raf.)
 (*Aphis viburnicola* Gill.)

Aphis crataegus-coccinea Raf.

- Syn.: (*Aphis crataegifoliae* Fitch.)

Aphis cornus-stricta Raf.

- Syn.: (*Aphis cornifoliae* Fitch.)

Chaitophorus populus-grandidentata Raf.

- Syn.: (*Aphis populus-grandidentata* Raf.)
 (*Chaitophorus populifoliae* Fitch.)

Chaitophorus populus-trepida Raf.

- Syn.: (*Aphis populus-trepida* Raf.)
 (*Chaitophorus populicola* Thos.)

Aphis brassicae Linn.

- Syn.: (*Aphis brassica-napus* Raf.)

Macrosiphum annulipes Raf.

- Syn.: (*Aphis annulipes* Raf.)
 (?*Aphis hieracium-venosum* Raf.)
 (?*Aphis campanula-riparia* Raf.)
 (?*Aphis verticolor* Raf.)
 (*Aphis erigeron-strigosum* Raf.)
 (*Aphis gibbosa* Raf.)
 (*Aphis hieracium-paniculatum* Raf.)
 (*Siphonophora rudbeckiae* Fitch.)

In listing the above species, I place a question mark (?) before 4 species on account of the variation which Rafinesque gives to antennæ and nectaries. Considering the fact that Rafinesque considered the winged specimens as males, and speaks of the males in one species being larger than the females, he must have at times considered immature specimens as females; such specimens correspond to the above questionable names (descriptions). In one description he mentions the fact that the appendages grow longer as the individuals mature. In yet another description he mentions that the antennæ are longer than the body and the appendages are very short. This species apparently was a *Macrosiphum* and I have so considered it.

Macrosiphum rosae Linn.

- Syn.: (*Aphis diplepha* Raf.)

Macrosiphum oreaster Raf.

- Syn.: (*Aphis oreaster* Raf.)
 (*Aphis jacobea-bakamita* Raf.)
 (*Aphis xanthelis* Raf.)
 (*Siphonophora ambrosia* Thomas.)

I feel that I should apologize for reviving these papers, but systematic workers will see that they must be considered and those having access to them should make an effort to identify as many species as possible.

Considerable discussion followed on the advisability of adopting Rafinesque names.

A NEW GENUS OF SAWFLIES FROM CHILE.

[Hymenoptera, Tenthridinidæ]

BY S. A. ROHWER.

Trichotaxonus, new genus.

Belongs to Emphytinæ of Dr. A. D. MacGillivray.

Head, thorax, venter, and legs with long hairs; head transverse, the vertex raised as in many Nematids; eyes oval, prominent, subparallel; malar space wanting; clypeus truncate, mandibles long, slender; antennæ 9-jointed, pedicel much longer than wide, but little longer than the scape, third joint longer than the fourth; thorax normal; basal plates widely separate at apex; abdomen of the usual type; hind basitarsis much shorter than the following joints; claws with two large, inner teeth; anterior wings of the normal type, transverse median in the middle of the discoidal cell; hind wings with a surrounding nervure, no closed discal cells, lanceolate cell petiolate, M_3 leaving the anal nervure at an obtuse angle.

Type: Trichotaxonus reedi Rohwer.

The male of this genus is unknown, but there can be no doubt that it would be much like the female.

Trichotaxonus reedi, new species.

Female.—Length 8 mm. Middle fovea and ocellar basin shallow, with low, rounded walls; postocellar area raised; head and thorax shining; scutellum with a few large punctures; scutellar appendage polished, impunctate; stigma broader at base; transverse radius strongly curved, hypopygidium rounded at apex. Black; abdomen beyond basal plates, except two apical segments, and hind femora yellow-red; four anterior tibiæ at base whitish, the rest and their tarsi pale brown. Wings dusky; venation dark brown; hair black.

Type locality: Chile. Collected by Mr. E. C. Reed.

Type: Cat. No. 13076, U. S. National Museum.